(E,E) α-farnesene   (Z,E) α-farnesene   (E,Z) α-farnesene   (Z,Z) α-farnesene

FIGURE 1

Farnesyl diphosphate   Farnesyl carbocation   (E,E)
α-Farnesene

(Z,E)
α-Farnesene
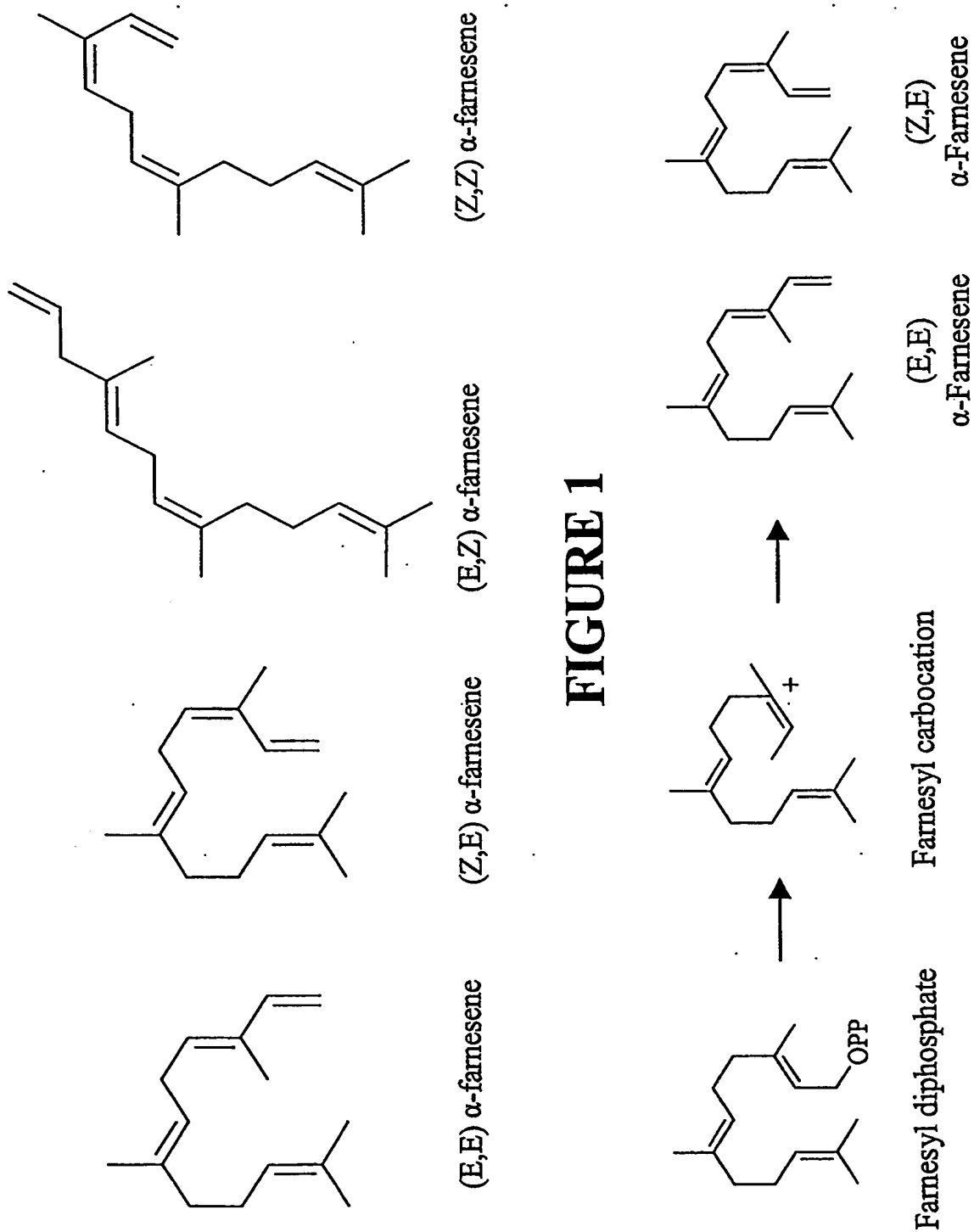
FIGURE 2

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   1  CTATAGCTTC TTGTATCCCA AACATCTCGA GCTTCTTCTA CACCAAATTA GGTATTCACT ATGGAATTCA GAGTTCACTT GCAAGCTGAT AATGACGAGA

 101  AAATTTTTCA AAACCAGATC AAACCCGAAC CTGAAGCCTC TTACTTGATT AATCAAACAC GGTCTCTGCAA TTACAAGCCA AATATTTTGGA AGAACCATTT

 201  CCTAGATCAA TCTCTTATCA GCAAATACGA TGGAGCATGAG TGTCTGACGAA GTTAATAGAA GAAGTTAAGA TTTATATATC TGCTGAAACA

 301  ATGGATTAG TAGCTAAGTT GGAGCTCATT GACAGCGTCC GAAAACTAGG CCTCGCGAAC AGGAAATCAA CGAAGCCCTA GACACGCATTG

 401  CAGCTATCGA AAGCCACAAAT CTCGGCACAA GAGACGATCT CTATGGTACT TCAAGATCCT CAGGCAGCAT GGCTATAAAG TTTCACAAGA

 501  TATATTTGGT AGATTCATGG ATGAAAAGGG CACATTAGAG AACCACCATT TCCCGGCATT AAAAGGAATG CTGGAACTTT TCCGAGCCCTC AAACCTGGGT

 601  TTCGAAGGTG AAGATATTTT AGATGAGCCG TCCAGCTAGC TGACCCTAGC ACGTCGTCATA TTTCTTATCC AGACAGTAAC CTTTCCAGGG

 701  ACGTAGTTCA TTCCCCTGGAC CTTCCATCAC ACCGCCAGAGT GCAGTGGTTT CATGTCAAAT CGCCTATGAA AAAGACATTT CTCCCGTCAA

 801  CCCCACCGTTA CTCCGAATTAC CAAAGCTTAA GTTCAACCTA AACTCCAAAA GAAGCCATCCA GGTGGCTGGGC AAATCTCGGC

 901  TTCCCAGACA ACTTCGAAAT TGCAAGATT AGACTGGTTG ATGTTTCTC ATCTGCTGTG GGAGTAGCAT TCCAGCCTGA GCACTCATCT TTTAGAATAT

1001  GTCTTACCAA AGTCATCAAC TTAGTACTGA TCATAGACGA CGTCTATGAT ATTTATGGCT CAGAGGAAGA GCTAAAGCAC TTCACCAATG CTGTTGATAG

1101  GTGGGATTCT AGGGAAACTG ACCAGCTTCC AGCAGTGTATG AAGATGTGTT TCCAAGTACT CTACAACACT ACTTGTGAAA TTGCTCGTGA AATTGAGGAG

1201  GAGAATGGTT GGAACCAAGT ATTACCTCAA TTGACCAAAG TCTGGGCAGA GCCATTAATTGG TGGAGGCAGA GTGGTATAAT AAGACCCATA

1301  TACCAACCCT TGAAGAGTAC CTAAGAAACG GATGGCATTC ATCATCAGTT CAGTGCTTT TGGTTCACTC GTTTTTCTCT ATAACTCATG AGGGAAACAA

1401  AGAGATGGCT GATTTTCTTC ACAAGAATGA AGATCTTTTG TATAAATATC CTCTCATCGT TCGGCCTCAAC AATGATTGG GAACTTCCGC GGCTGAACAA

1501  GAGAGAGGGG ATTCTCCTTC ATCAATCGTA TGTTACATGA GAGAAGTGAA TGCCCTCTGAA GAACAGCCTA GCAAGAACAT TAAGGGGCATG ATAGACAATG

1601  CATGGAAGAA AGTAAATGGA AAATCCTTCA CAACAAACCA AGTGCCTTTT CTGTCATCAT TCATGAACAA TGCCACAAAC ATGGCACGTG TGCCCCACAG

1701  CCTTTACAAA GATGGACATG GGTTTTGGTGA CCAAGAGAAA CGGCCTCCGGA CCCACAATCCT GTCTTTACTA TTCCAACCTC TTGTAAACTA CTACTCATAT

1801  AGTTTGAAAT AAATAGGCAGC AAGAAGTTTG CGGTTCAGTT CGTCATGGAT AAATTAATCT TTAACAGTTTG TAACCTTGTT GCACAAAGAT TATGAATAAA

1901  AAGTTGTAGT TTGTCCGTTTA TTTTTAAAA TTTTTAAAA AAAAAAAAAA AA
```

FIGURE 3

```
  1   MEFRVHLQAD NEQKIFQNQM KPEPEASYLI NQRRSANYKP NIWKNDFLDQ
 50   SLISKYDGDE YRKLSEKLIE EVKIYISAET MDLVAKLELI DSVRKLGLAN
100   LFEKEIKEAL DSIAAIESDN LGTRDDLYGT ALHFKILRQH GYKVSQDIFG
150   RFMDEKGTLE NHHFAHLKGM LELFEASNLG FEGEDILDEA KASLTLALRD
200   SGHICYPDSN LSRDVVHSLE LPSHRRVQWF DVKWQINAYE KDICRVNATL
250   LELAKLNFNV VQAQLQKNLR EASRWWANLG FADNLKFARD RLVECFSCAV
300   GVAFEPEHSS FRICLTKVIN LVLIIDDVYD IYGSEEELKH FTNAVDRWDS
350   RETEQLPECM KMCFQVLYNT TCEIAREIEE ENGWNQVLPQ LTKVWADFCK
400   ALLVEAEWYN KSHIPTLEEY LRNGCISSSV SVLLVHSFFS ITHEGTKEMA
450   DFLHKNEDLL YNISLIVRLN NDLGTSAAEQ ERGDSPSSIV CYMREVNASE
500   ETARKNIKGM IDNAWKKVNG KCFTTNQVPF LSSFMNNATN MARVAHSLYK
550   DGDGFGDQEK GPRTHILSLL FQPLVN*
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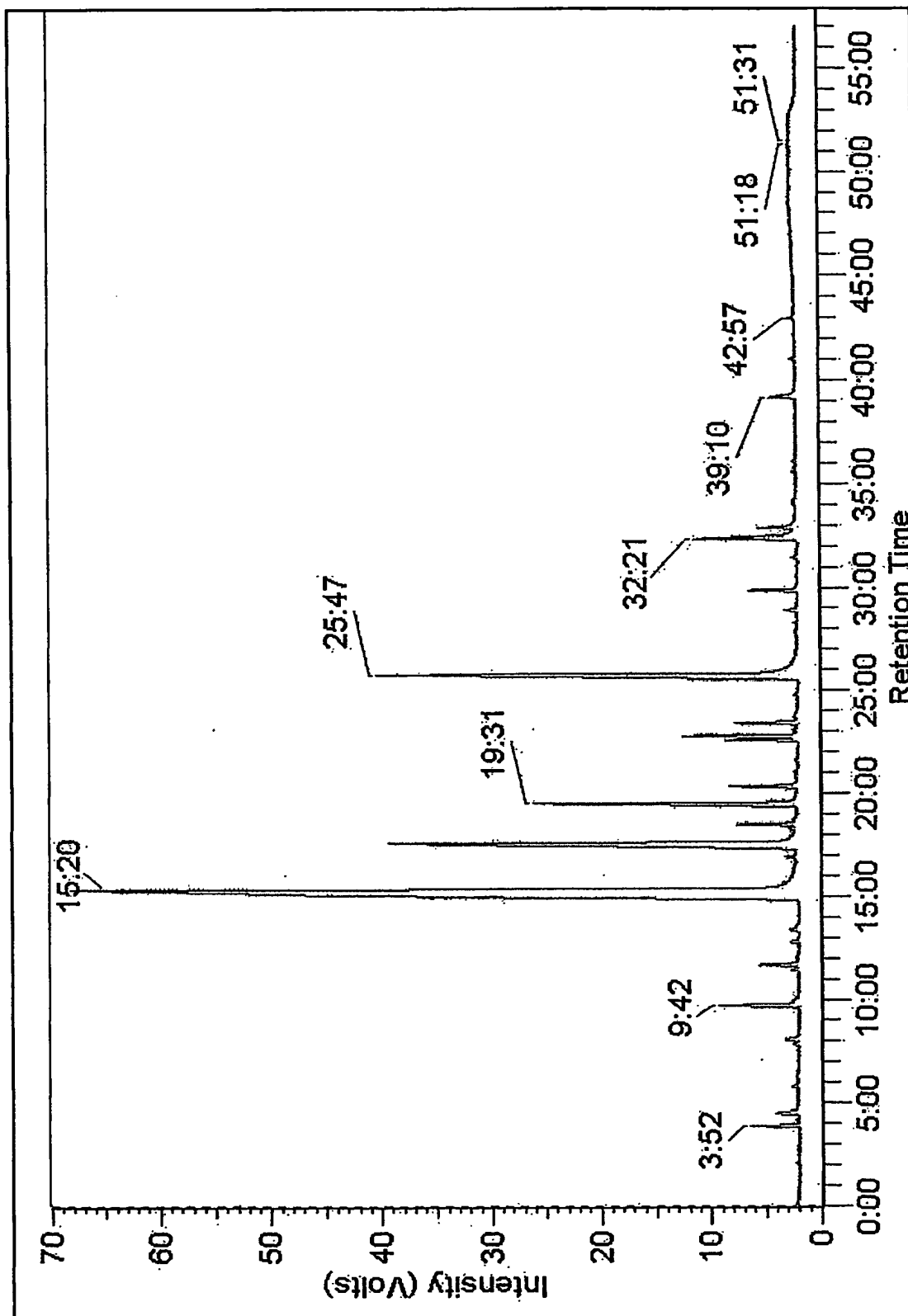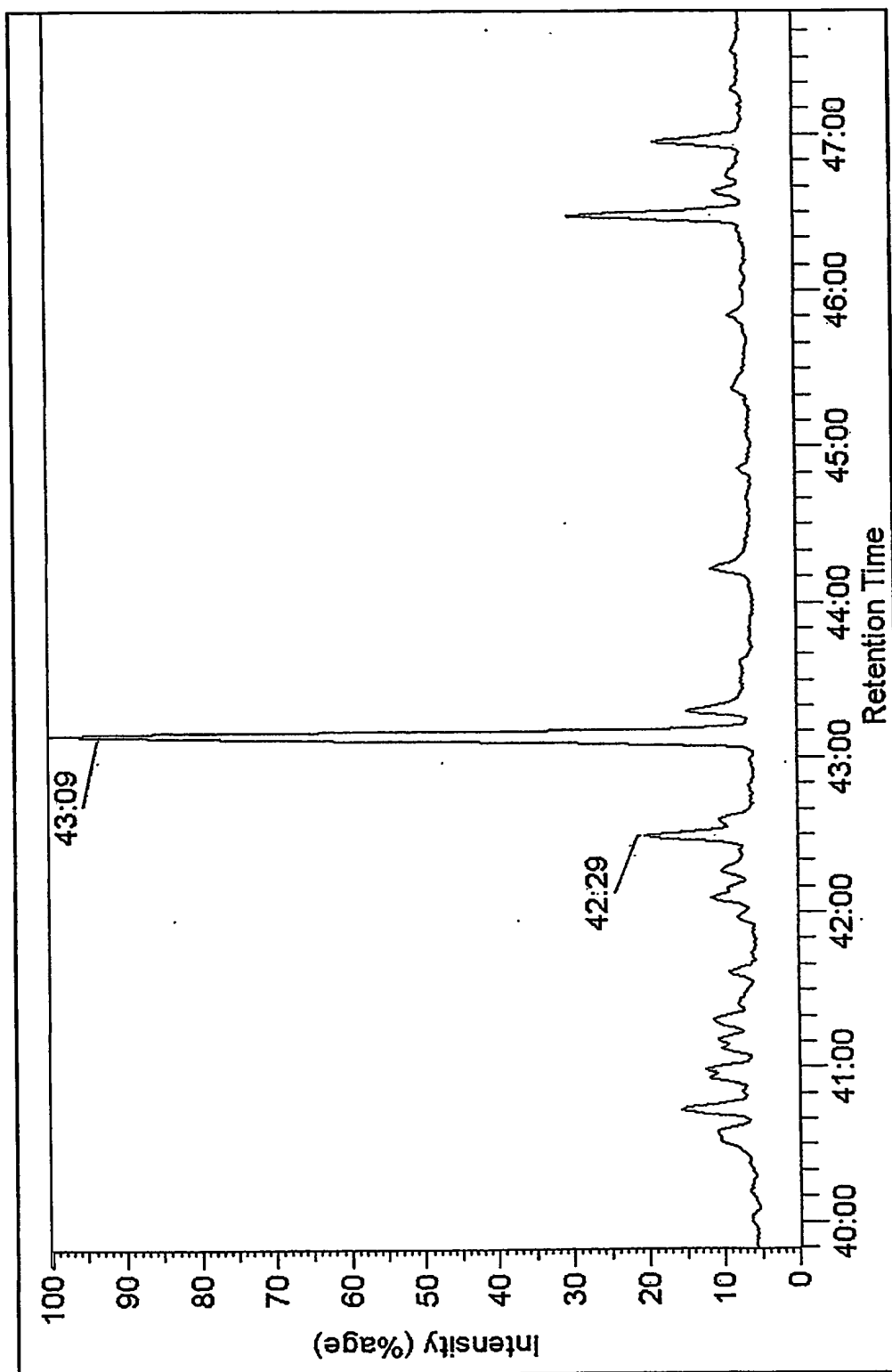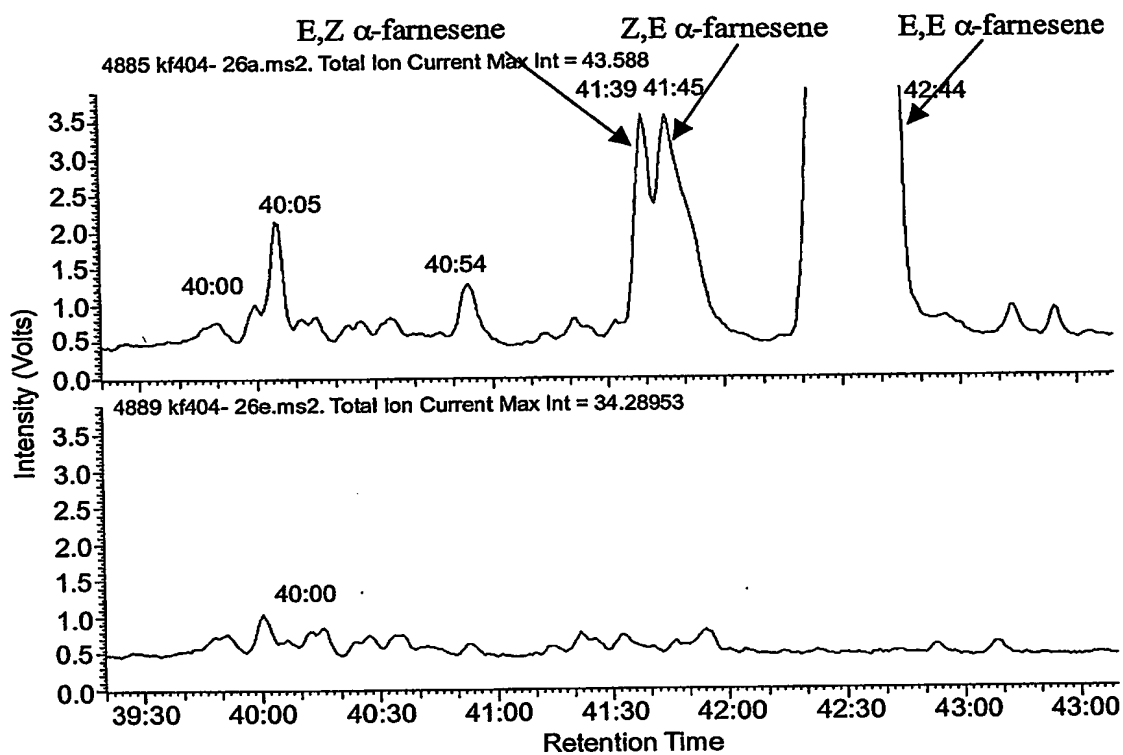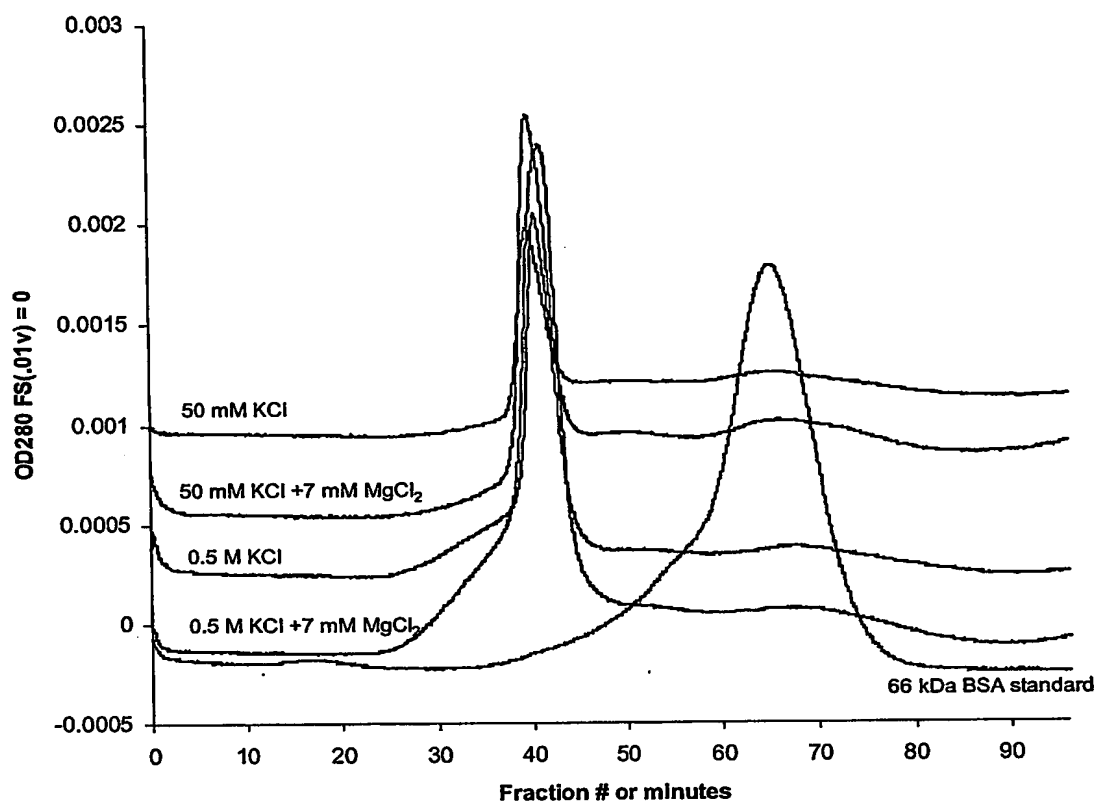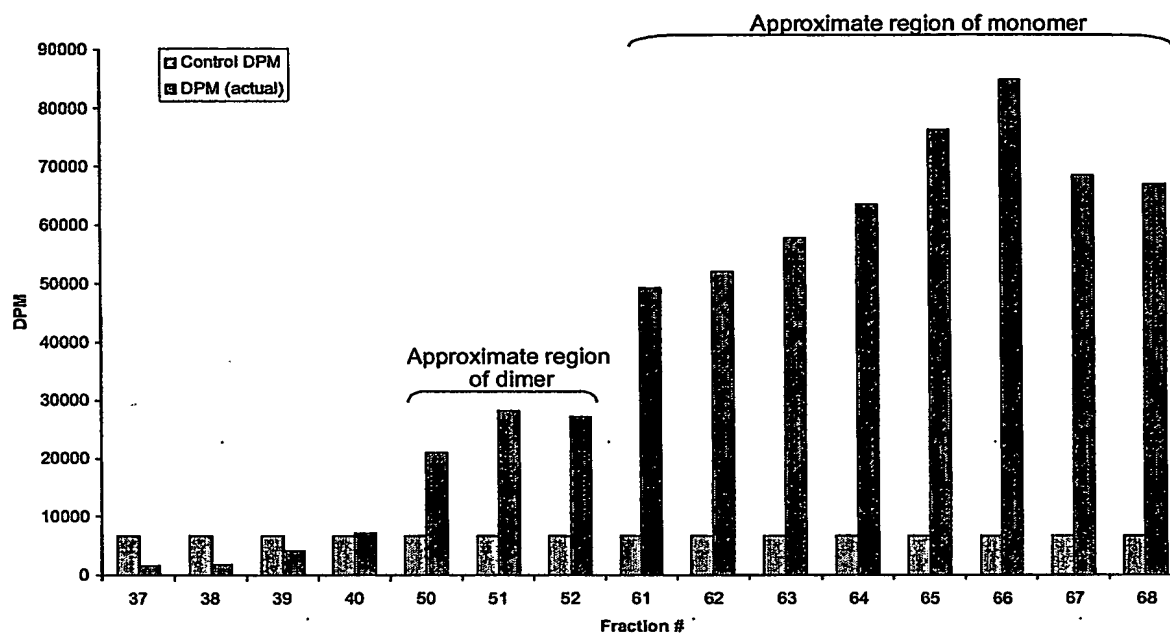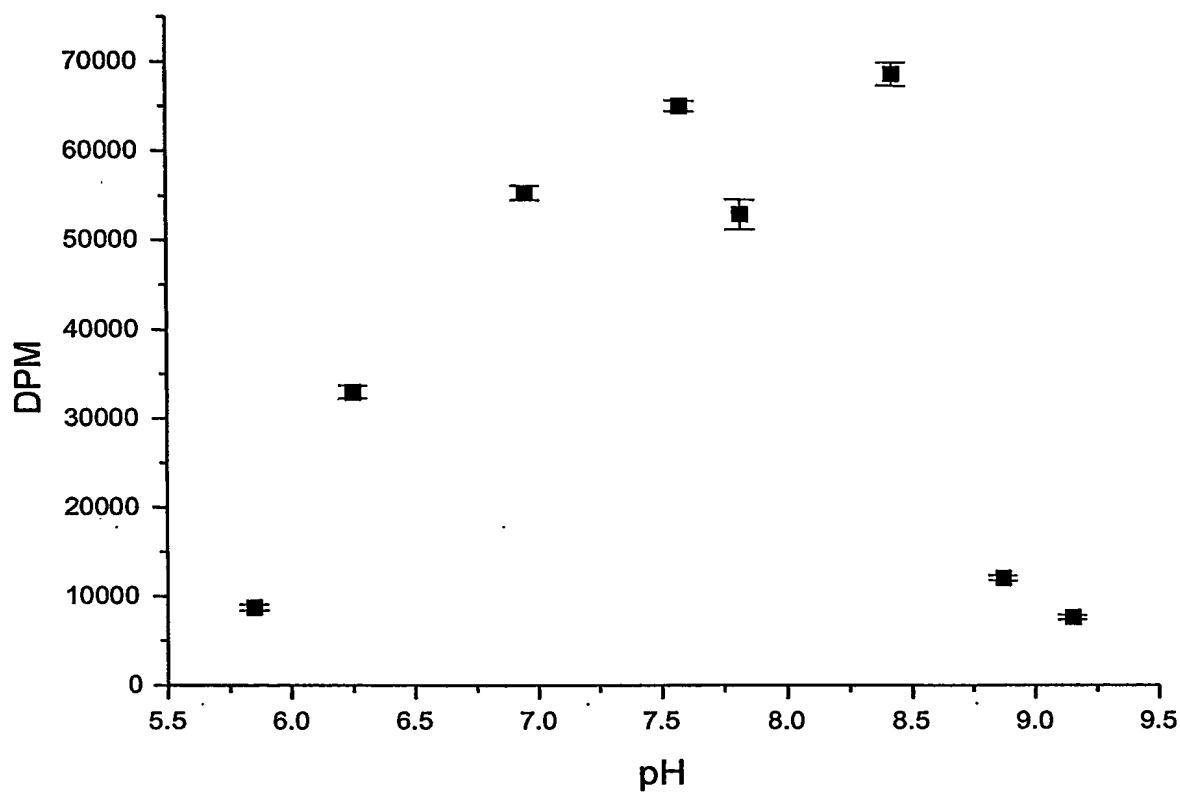
FIGURE 4

FIGURE 5

FIGURE 6

FIGURE 7

FIGURE 8

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FIGURE 9

FIGURE 10

FIGURE 11

FIGURE 12

FIGURE 13

FIGURE 14

FIGURE 15

FIGURE 16

FIGURE 17

FIGURE 18

FIGURE 19

A

B

C

i

ii

'Aotea' expanding leaf
'Royal Gala' floral meristem
'Royal Gala' 10 DAFB fruit
'Royal Gala' 24 DAFB fruit
'Royal Gala' 59 DAFB fruit
'Royal Gala' 59 DAFB seed
'Royal Gala' 87 DAFB fruit cortex
'Royal Gala' 126 DAFB fruit cortex
'Royal Gala' 126 DAFB fruit core
'Royal Gala' 150 DAFB fruit cortex
'Royal Gala' 150 DAFB fruit peel
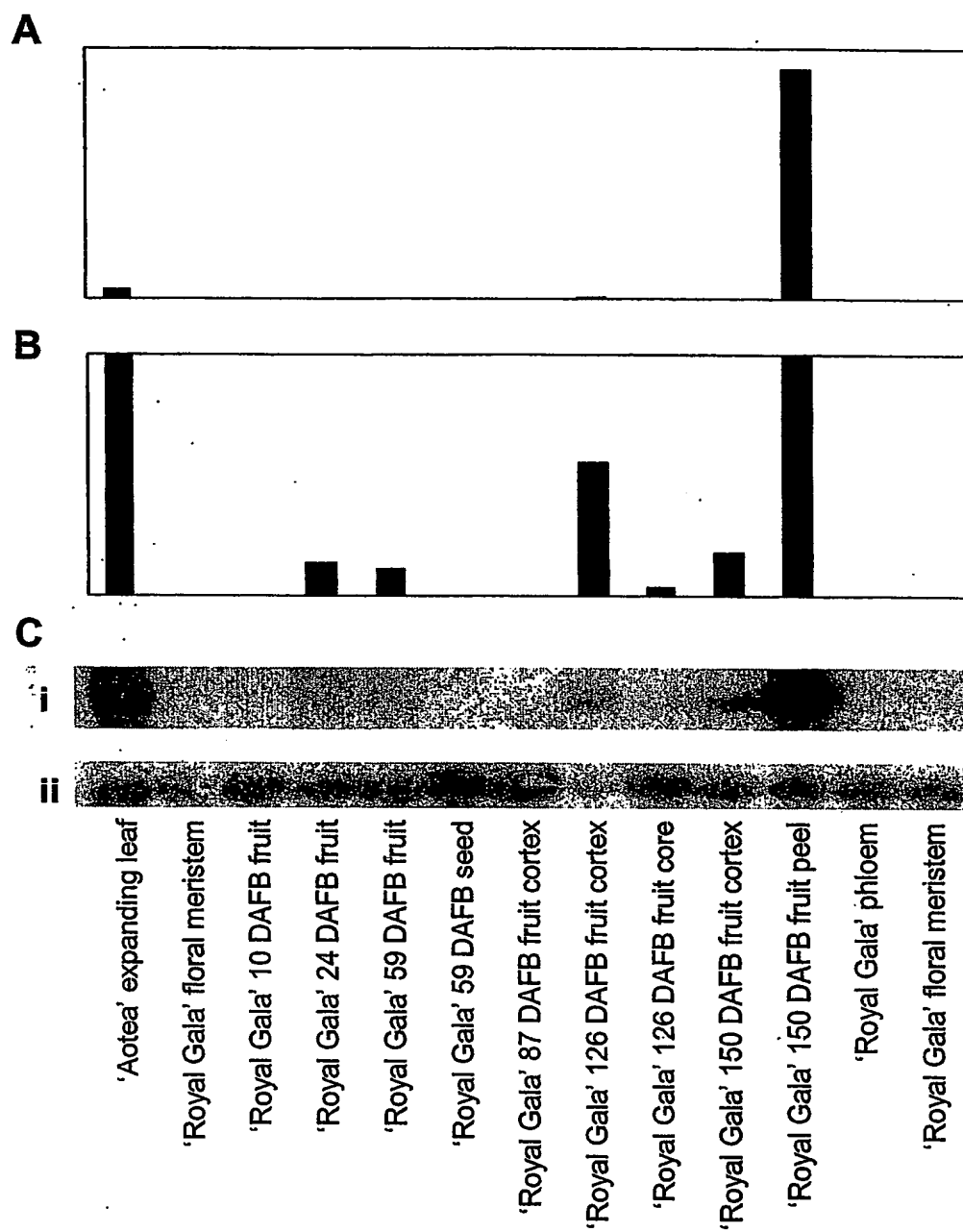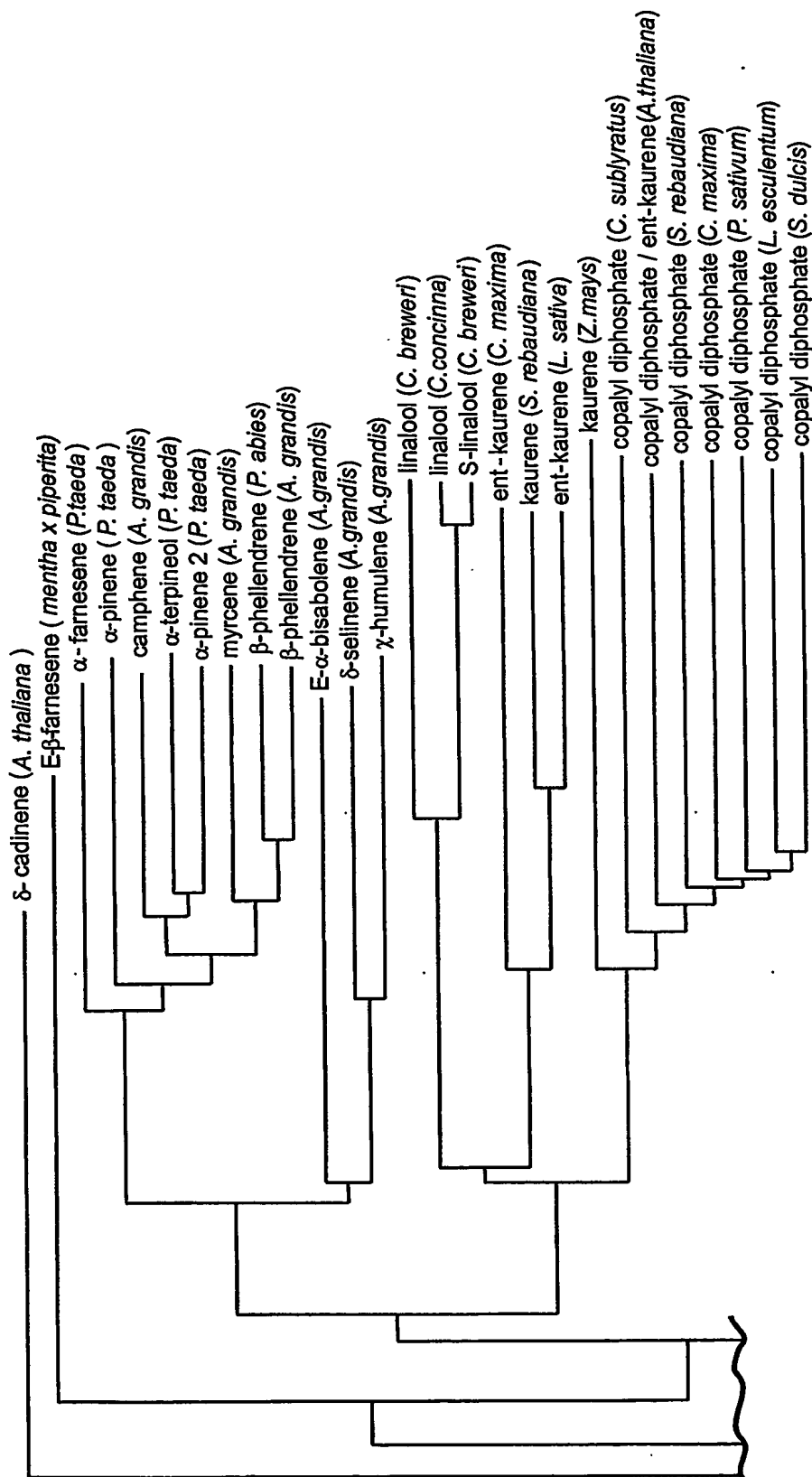'Royal Gala' phloem
'Royal Gala' floral meristem
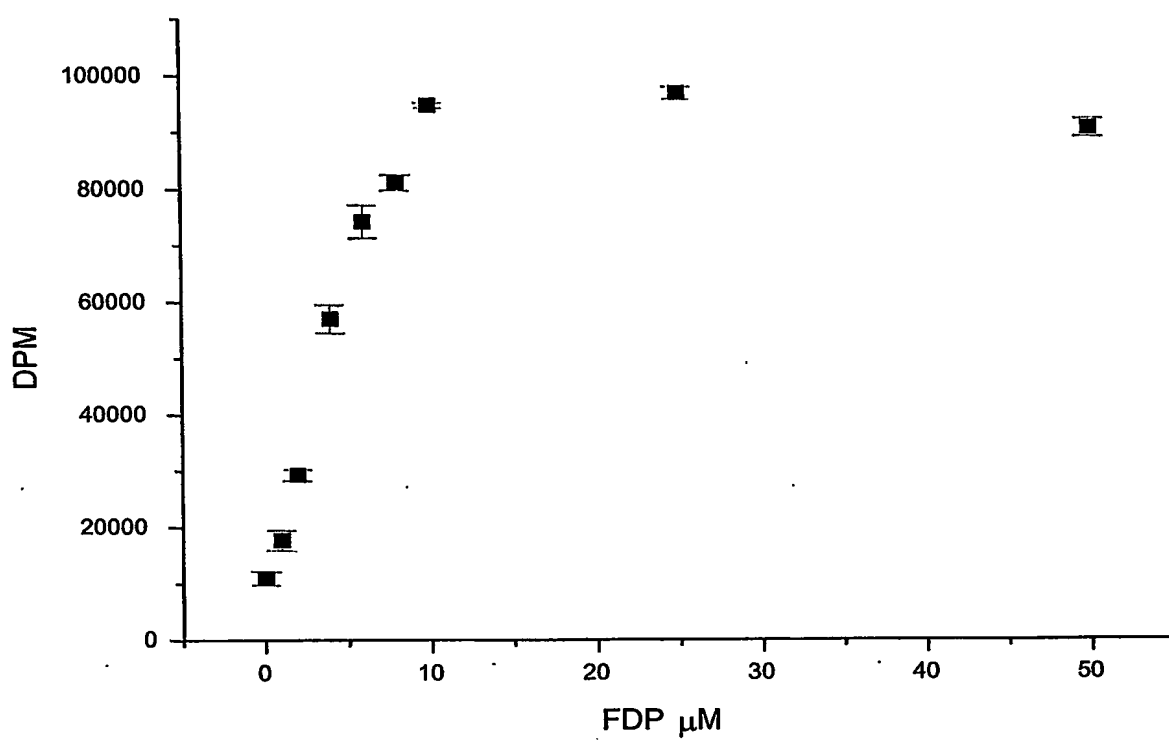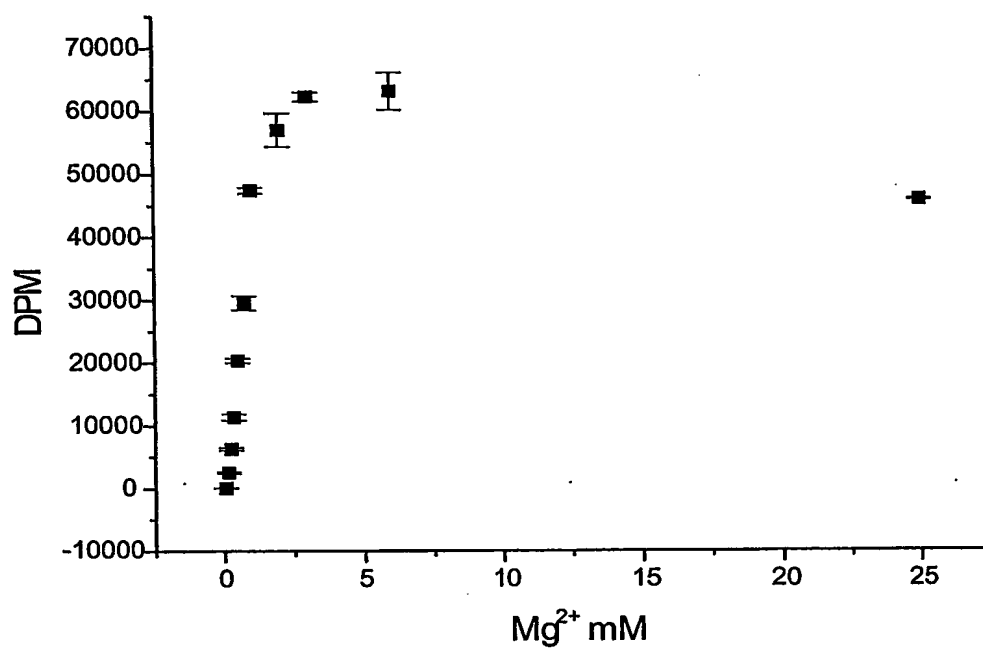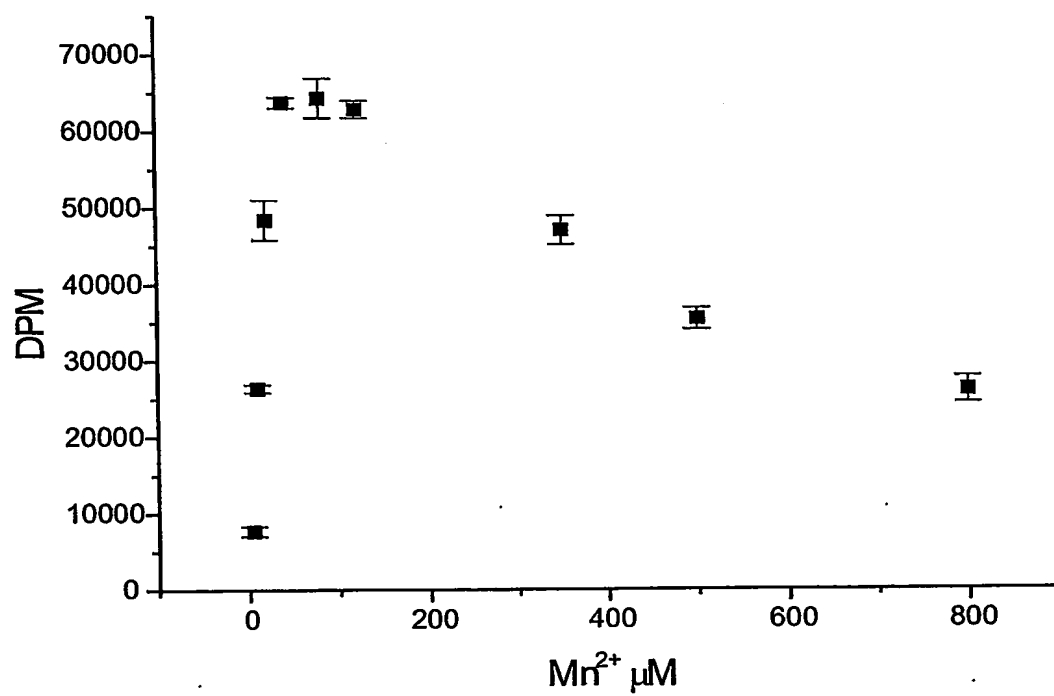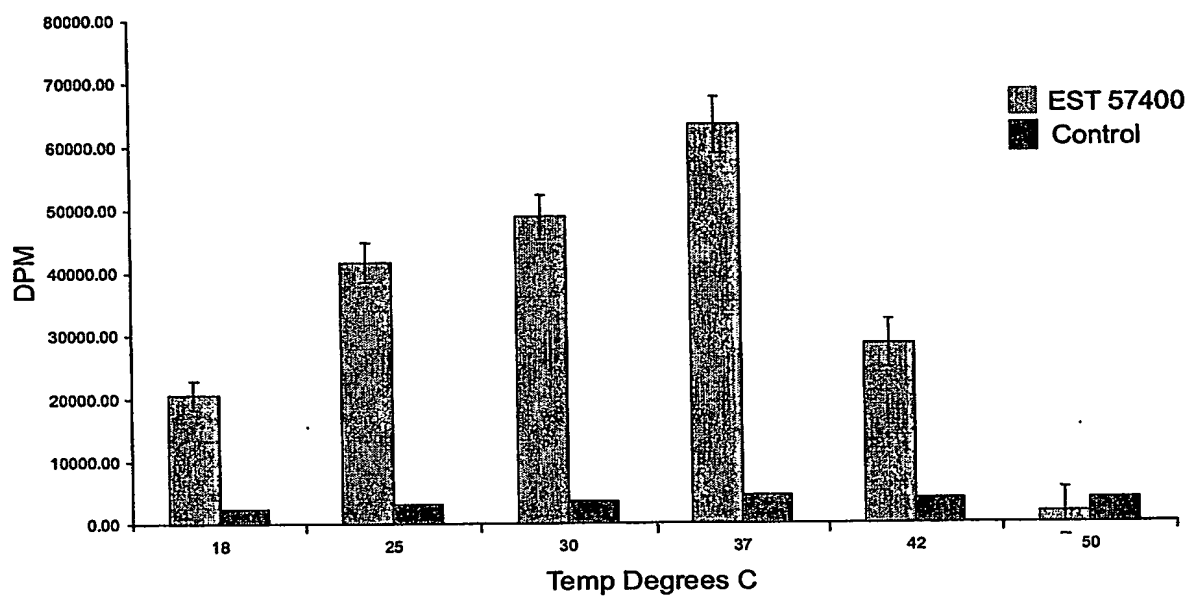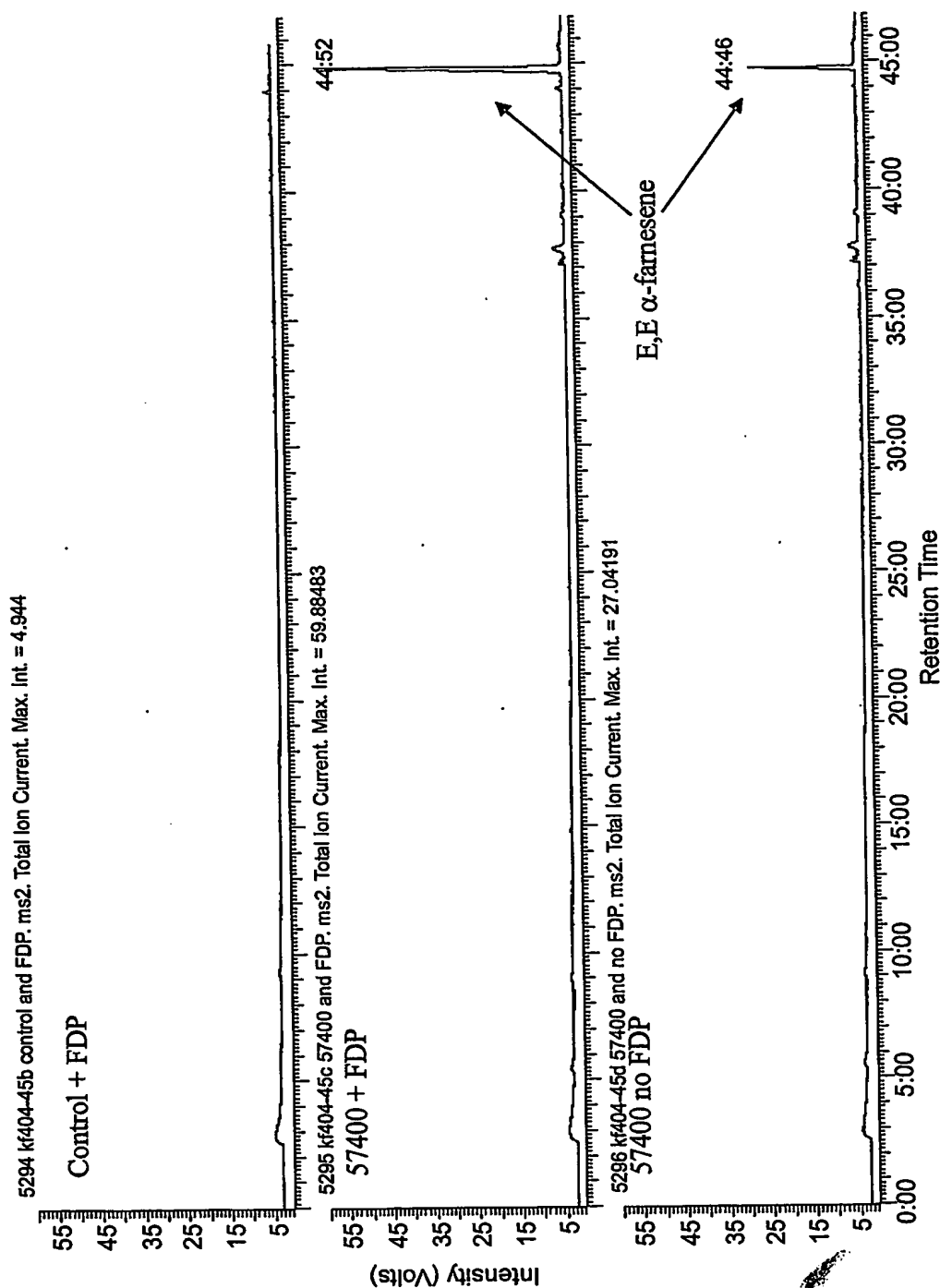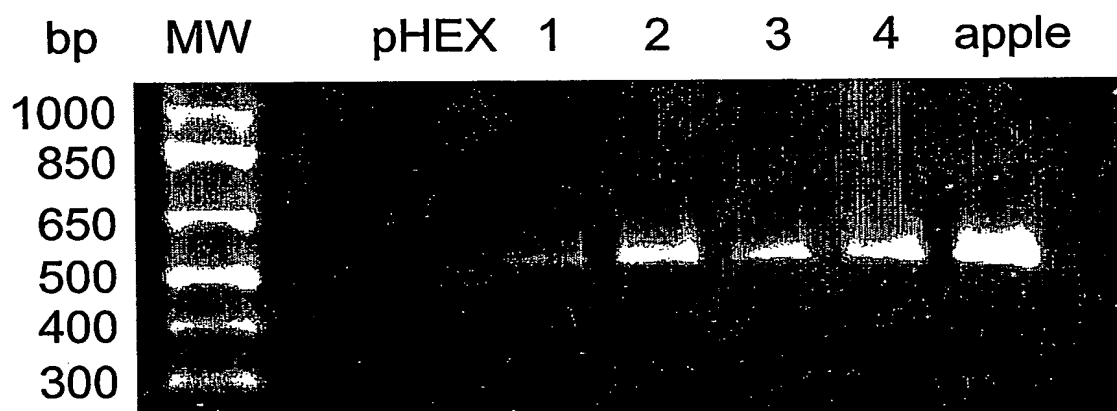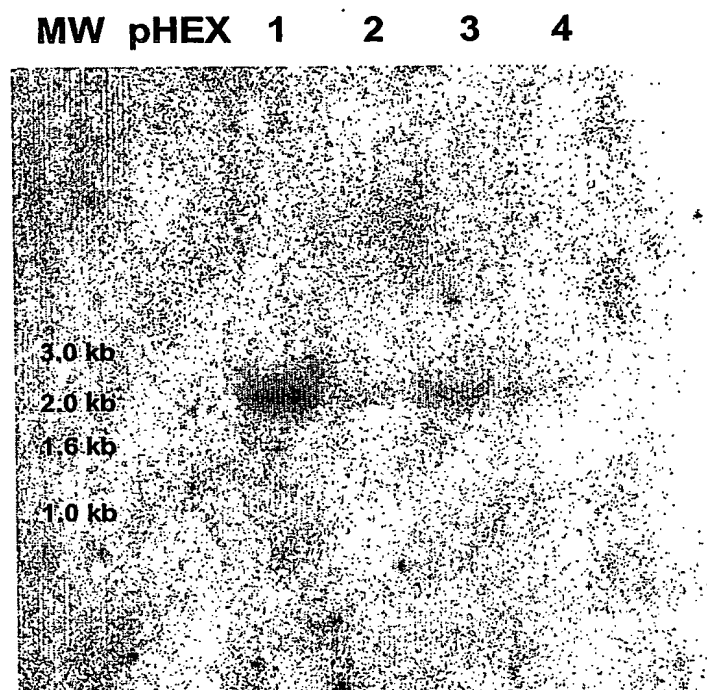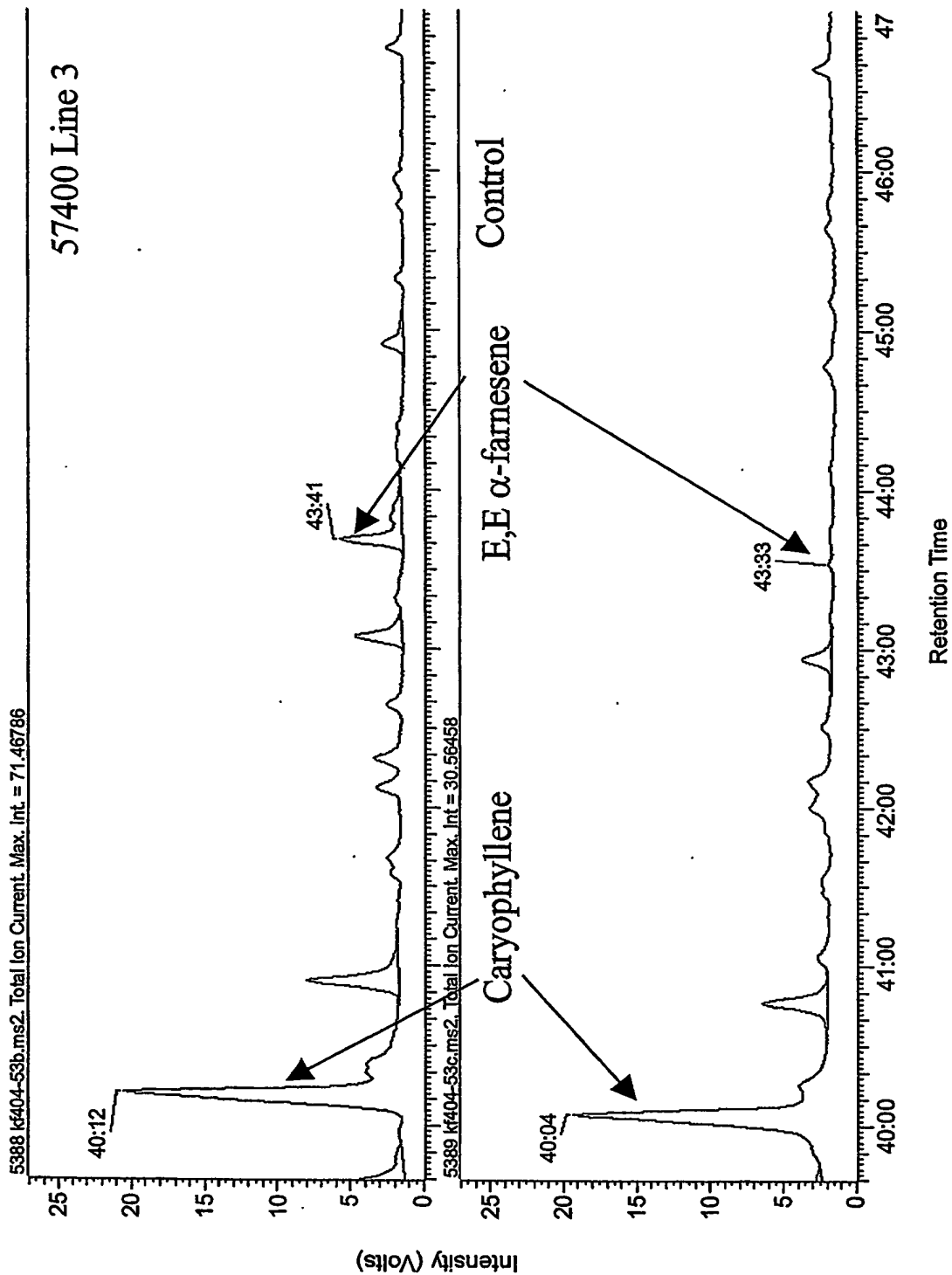
FIGURE 20

FIGURE 21 (continued next page)

FIGURE 21 (continuation)